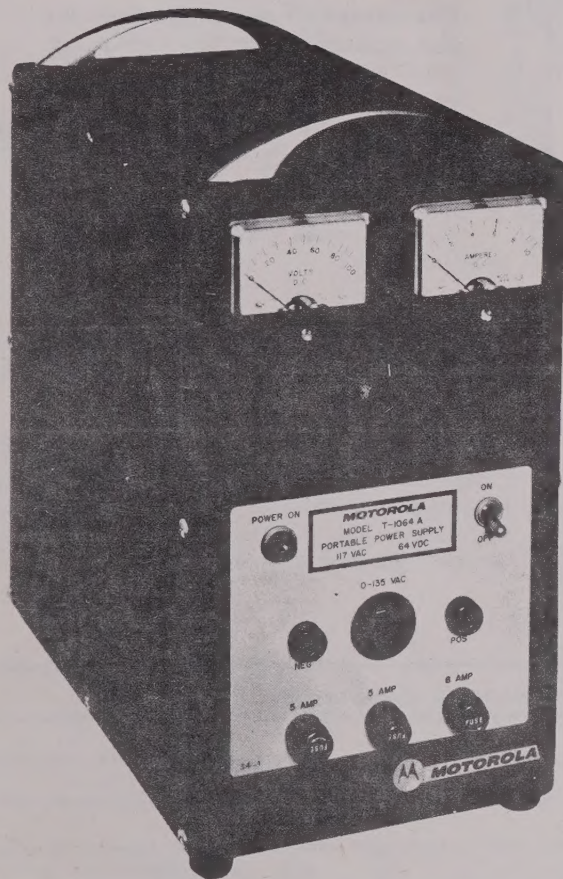




1. INTRODUCTION

The Motorola Model T1064A Portable Power Supply is used primarily for servicing 64 volt railroad radio equipment. It may also be used in other applications requiring a d-c source of 0 to 85 volts or an a-c source of 0 to 135 volts.

The Model T1064A may be used to simulate actual operating conditions by supplying slightly higher or lower than recommended operating voltages. This procedure may serve as an aid in locating intermittent faults.

MOTOROLA

PORTABLE POWER SUPPLY

MODEL T1064A
64 VOLT

2. DESCRIPTION

The Model T1064A is a continuously variable power supply that will supply operating power to equipment requiring a d-c input of 0 to 85 volts or an a-c input of 0 to 135 volts. The unit will handle currents of 5 amperes continuously and 7 amperes intermittently when used as a d-c supply and 6 amperes when used as an a-c supply. The ripple content of the d-c output is less than 1% at 5 amperes.

The d-c output is brought out to receptacles on the front panel. A conventional a-c outlet is mounted on the front panel for connection to the variable a-c source.

A d-c voltmeter and a d-c ammeter are mounted on the front panel to meter the d-c voltages and currents supplied with an accuracy of $\pm 2\%$ of full scale. An a-c calibration chart is included in these instructions to convert the readings of the d-c voltmeter to approximate a-c voltages when the unit is used as an a-c source.

3. OPERATION

The Model T1064A may be placed in any convenient location that does not obstruct the air vents.

a. DC Output

(1) Connect the power cord to a 110-120 volt a-c source.

CAUTION

Disconnect all equipment from the a-c outlet on the front panel when using the unit as a d-c supply.



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(2) Connect the equipment to be powered to the d-c receptacles on the front panel with the two plug-in connectors supplied and heavy wire. Number 14 is the minimum recommended wire size for most applications.

NOTE

Be certain of proper polarity when making connections to the equipment (RED-POSITIVE, BLACK-NEGATIVE).

(3) Turn the output control counterclockwise to the end of its range (minimum voltage).

(4) Place the ON-OFF switch in the ON position.

(5) Advance the output control (clockwise rotation) until the desired voltage is indicated on the d-c voltmeter.

NOTE

The glow that can be seen through the air vents as the output control is advanced is a normal condition created by the internal load.

b. AC Output

(1) Connect the power cord to a 110-120 volt a-c source.

CAUTION

Disconnect all equipment from the d-c receptacles on the front panel when using the unit as an a-c supply.

(2) Turn the output control counterclockwise to the end of its range (minimum voltage).

(3) Place the ON-OFF switch in the ON position.

(4) An a-c operated device with a current drain of 6 amperes or less may now be connected to the a-c outlet on the front panel.

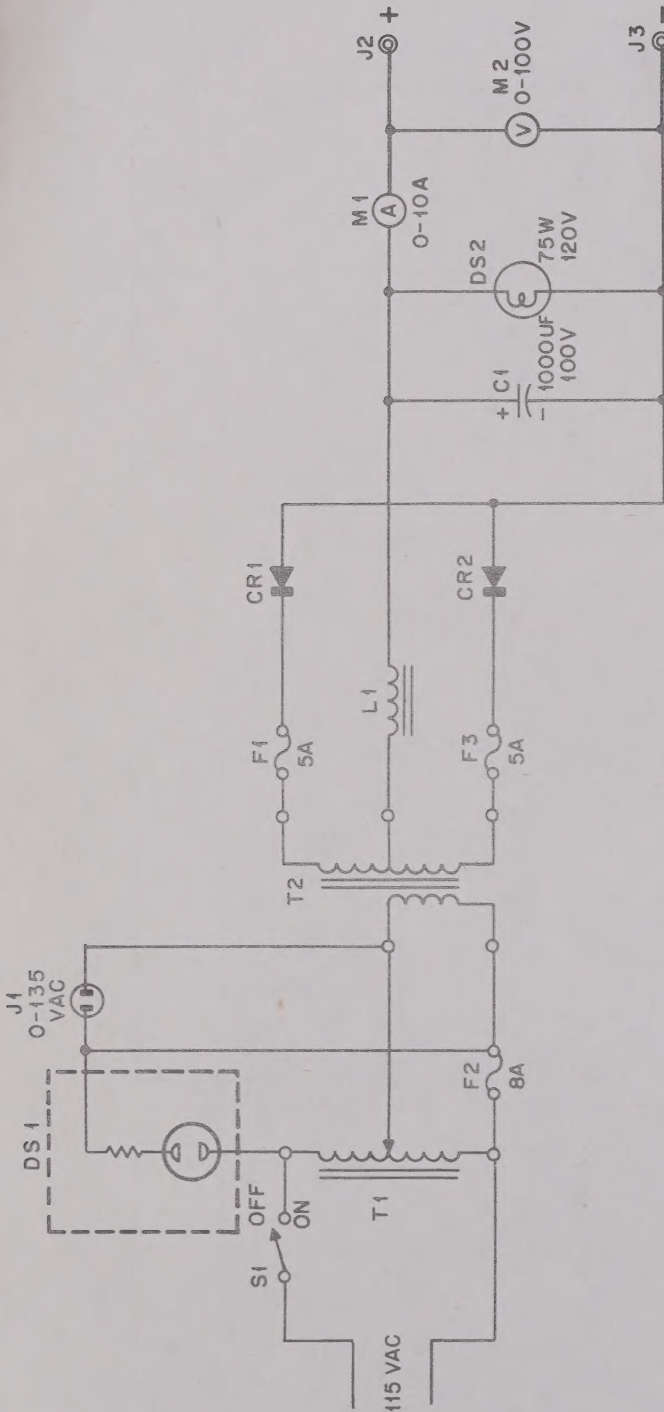
(5) Refer to the a-c calibration chart included in these instructions for the reading to be obtained on the d-c voltmeter. Then advance the output control (clockwise rotation) until the meter indicates this reading.

GUARANTEED PERFORMANCE SPECIFICATIONS

MODEL	T1064A 64 Volt Portable Power Supply		
DC OUTPUT	0-85 v d-c		
AC OUTPUT	0-135 v a-c		
METERING ACCURACY	±2% full scale		
CURRENT CAPACITY	d-c operation		a-c operation
	continuous 5 amperes	intermittent 7 amperes	6 amperes
RIPPLE CONTENT	less than 1% at 5 amperes		
INPUT VOLTAGE	110-120 volts 50-60 cycle a-c		
POWER CONSUMPTION	variable with load approximately 525 watts with 5 amp 64 v d-c load		
REGULATION	maximum 10 volt drop (receiver standby to full load 64 v d-c operation)		
OVERALL DIMENSIONS	13-1/2" high x 8" wide x 13" deep		
WEIGHT	approximately 50 lbs.		

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

PARTS LIST For Schematic Diagram 63B868136-O



MODEL TABLE

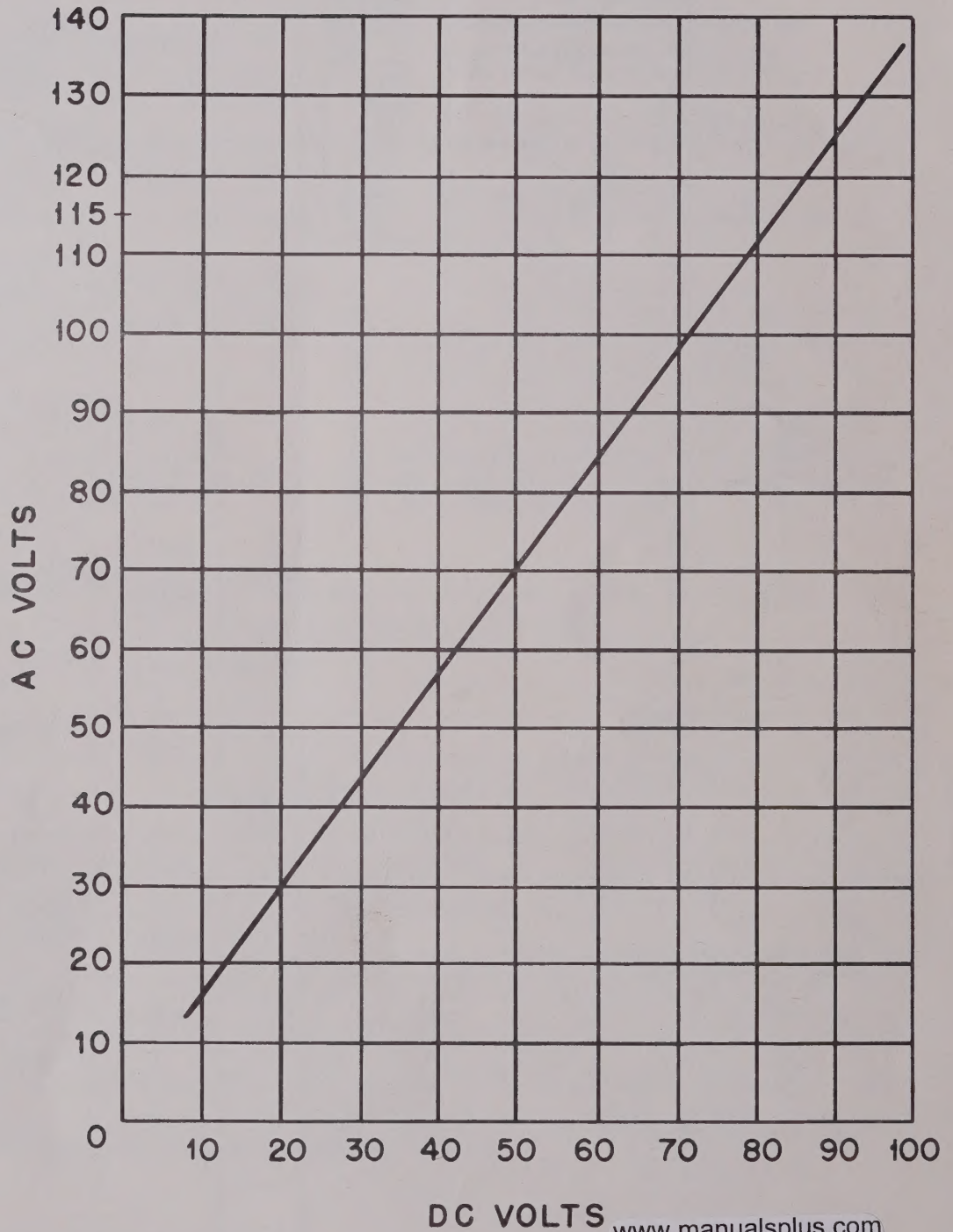
MODEL	SUFFIX	DESCRIPTION
T1064A		64VOLT PORTABLE POWER SUPPLY

DIAGRAM NO. 63B868136

REFERENCE SYMBOL	MOTOROLA PART No.	DESCRIPTION
C1	23K868653	<u>CAPACITOR, fixed:</u> electrolytic; 1000 uf; 100 vdcw
CR1	48K868654	<u>CRYSTAL UNIT:</u> rectifier same as CR1
DS1	60K868657	<u>LAMP:</u> assembly; includes lamp and socket
DS2		incandescent; 75 w/120 v; screw type base
F1	65R52293	<u>FUSE, cartridge:</u> slow blow type; glass; 5 ampere/250 v; 1-1/4" x 1/4"
F2	65B846796	steatite body; 8 ampere/250 v; 1-1/4" x 1/4"
F3		same as F1
J1	9A893224	<u>CONNECTOR, receptacle:</u> female; a-c; 2 contact; molded black bakelite body; chassis mounting
J2	9K868661	single contact; chassis mounting; coded RED
J3	9K868662	same as J2 except coded BLK
L1	25K868652	<u>REACTOR:</u> choke; filter
M1	72K868656	<u>METER:</u> d-c ampmeter; 0-10 ampere
M2	72K868655	d-c voltmeter; 0-100 volt
S1	40A481957	<u>SWITCH; toggle:</u> spst
T1	25K868650	<u>TRANSFORMER:</u> variac; 0-135 volts; 7.5 ampere power
T2	25K868651	
XDS2	9K868658	<u>SOCKET:</u> single contact; screw type base; used with DS2
XF1	9B865564	<u>FUSEHOLDER:</u> extractor post type; for 1-1/4" x 1/4" fuse; single hole panel mounting; includes mounting hardware.
XF2		same as XF1
XF3		same as XF1
NON-REFERENCED ITEMS		
	28K868659 28K868660	<u>CONNECTOR, plug:</u> male; single contact; coded RED coded BLK
	30K600980	<u>CABLE, power:</u> a-c; 2 conductor; insulated; includes 2 contact a-c plug

T1064A AC CALIBRATION CHART 115 VOLTS INPUT

BEFD-2925-O



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